Name of Work :- Improvements to roads, drains and other developmental works in ward no- 03 under road development head in Chief Minister Nava Nagarothana grants ... (Package -03)

Sl No	Description of Work	Unit	BOQ Qty	Executed Qty
1	Removing and resetting of footpath slab	Sqm	17038.60	17037.76
2	Removing and resetting of kerb stone	m	13612.00	13611.20
3	Earthwork Excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications and as per directions of the Engineer-in-charge of the work	cum	9587.23	9587.18
4	KSRB 4-1.2: Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC@ 220 kgs, with 40mm and down size graded granite metal course aggregates@ 0.892 cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15cms thick well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1.4.2	cum	595.86	595.60
5	Providing TMT Bars Fe 500 steel reinforcement for RCC work including straightening, cutting, bending, hooking, placing in position, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification and as per directions of the Engineer in charge of work	MT	72.91	72.89
6	Providing and laying plain/reinforced cement concrete for side drains walls & bottom thickness 15cm using M20 nominal mix concrete with OPC at 300 kgs with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc complete excluding cost of material as per MORTH specification No 1500,1700,2200 including cost of materials, labour, HOM complete as per specifications	cum	1161.17	1160.80
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement@ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of materials, labour, HOM complete as per specifications	cum	126.60	126.50
8	Providing and fixing precast reinforced concrete slab 10cm thick of mix M20 using 20mm and downsize graded granite metal using reinforcement 10mm dia steel at 150mm c/c both ways cost, transportation, hire charges of machinery, machine cutting the vertical face to get plain even surface complete with all leads and lift conveyance charges, labour charges inclusive of cost of all materials(data rate enclosed)	Sqm	4621.70	4620.90

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Sl No	Description of Work			
9	Providing and laying precast drain cover slabs of 250mm thick of mix M20 using graded granite jelly 20mm downsize metal with steel reinforcement including form work, lift charges, curing and concrete finished surfaces on both sides etc. complete and as per drawing and direction of Engineer-in-charge of work (data rate enclosed)	Sqm	122.40	122.40
10	Providing and fixing Precast solid concrete kerb stones of size 450 x 200 x 400mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc. complete as per specifications and as per directions of Engineer in charge of work	Nos	9502.00	9499.56
11	Painting two coats after filling the surface with syntetic enamel paint in approved shades on new plastered concrete surfaces with materials, labour complete as per specifications and as per directions of the Engineer in charge of work	Sqm	1770.00	1769.24
12	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes,in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications and as per directions of the Engineer in charge of work.	cum	898.28	897.73
13	Construction of Granular Sub-Base Grading V as sub base and drainage layer by providing coarse stone aggregates of granite / trap / basalt material, mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and and compacting with vibratory roller to achieve 98% proctor density, complete as per specifications.and as per directions of the Engineer-in-charge of the work	cum	2566.50	2564.93
14	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications and as per directions of the Engineer-in-charge of the work	cum	384.98	384.74
15	Compaction of original ground by mecahnical means including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specificationsnd as per directions of the Engineer-in-charge of the work	Sqm	513.30	512.99
16	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications and as per directions of the Engineer-in-charge of the work	Sqm	2579.00	2578.47
17	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications and as per directions of the Engineer-in-charge of the work	Sqm	79728.07	79727.36

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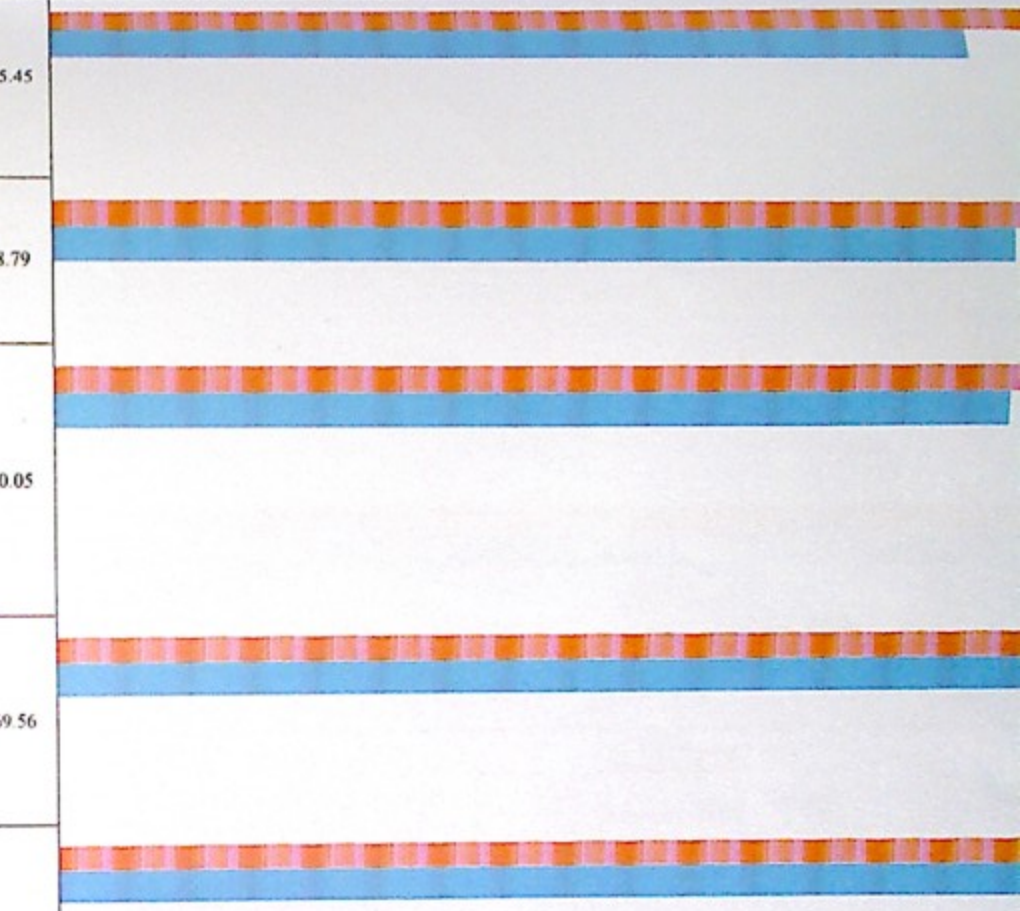
Sl No	Description of Work	Unit	BOQ Qty	Executed Qty
18	Providing and laying dense graded using 120 TPH capacity Asphalt Batch Mix plant with sensor paver GR-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen crushed aggregates of specified grading premixed with VG30 grade bituminous binder and transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all aspects complete as per specifications. Clause 505 of MORTH V revision	cum	81005.88	81005.45
19	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications and as per directions of the Engineer-in-charge of the work	Sqm	1088.99	1088.79
20	Providing and laying bituminous concrete 40mm thick with hot mix plant using 40-60 TPH capacity HMP with mechanical paver grading -II (30-45 mm) with 5.4 % of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) crused aggregates of specified grading premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all aspects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015	cum	3240.24	3240.05
21	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications and as per directions of the Engineer-in-charge of the work	Sqm	4070.19	4069.56
22	KSRRB M800-35 Supply and installation of Moulded shank raised pavement markers made of polycarbonate and ABS (Acrylonitrile Butadience Styrene) moulded boady and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to specifications of category A of MORTH Circular No. RW/NH/33023/10-97- Do III Dt. 11.06.1997. The height, width and length shall not exceed 50mm, 100mm and 102 mm and with minimum reflective area of 13 sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the Engineer	Nos	3720.10	3719.33



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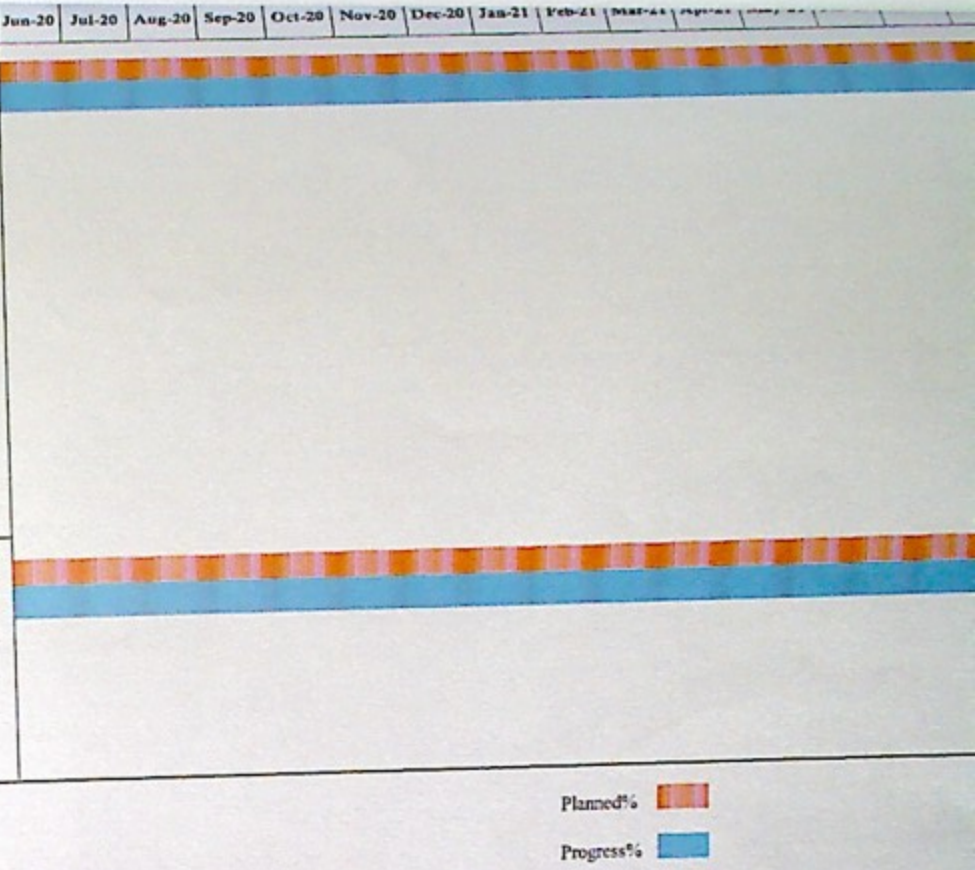
Sl No	Description of Work	Unit	BOQ Qty	Executed Qty
23	Supply and fixing of Retro- reflective Single arrow Road Name Signboard of size 1600mm x 900mm made out of reflective sheeting conforming to Type XI stands of ASTM D 4956-09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4mm thick Aluminium composite material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back support frame SS Angle of 15 mm x 20 mm x 1.2 mm supported by 38mm OD stainless steel pipe all around in 304 grade and 2 Nos of vertical posts of 50mm OD stainless steel pipe of 202 grade firmly fixed to the ground by means of properly designed foundation of size 450mm x 450mm x 600mm in 1:1.5:3 ratio cement concrete. The background shall be blue in colour with letters and border in white, the item includes earthwork excavation, cost of all materials, loading,unloading, lead, lift, transportation etc. complete as per direction of Engineer in charge of work clause 6.9 of IRC 67-2012 for Type XI retro reflective sheeting from the sheeting manufacturer & a certified copy of test reports from an independent test laboratory confirming to clause 6.7 of IRC 67-2012 including outdoor weather exposure report for the retro reflective sheeting offered shall be submitted by the contractor for technical qualification in the tender	Sqm	12.96	12.96
24	Direction and Place Identification Signs with more than 0.9 sqm Size Board:- Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm 2 Nos firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing	Nos	24.30	24.30



Contractor representative

Assistant Engineer

Consultant representative

Assistant Executive Engineer

CERTIFICATE

Certified that the work is done satisfactorily